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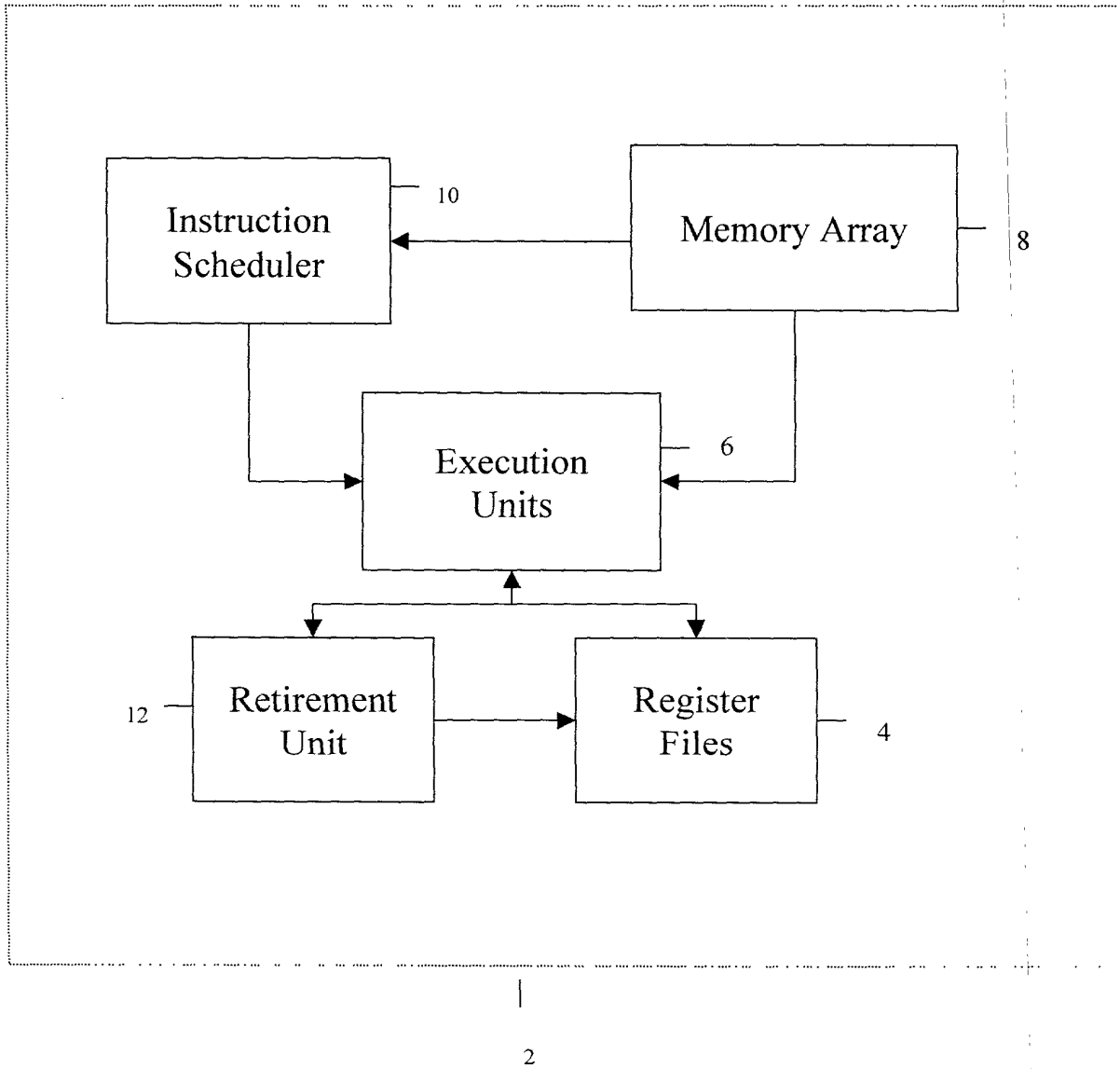


FIGURE 1

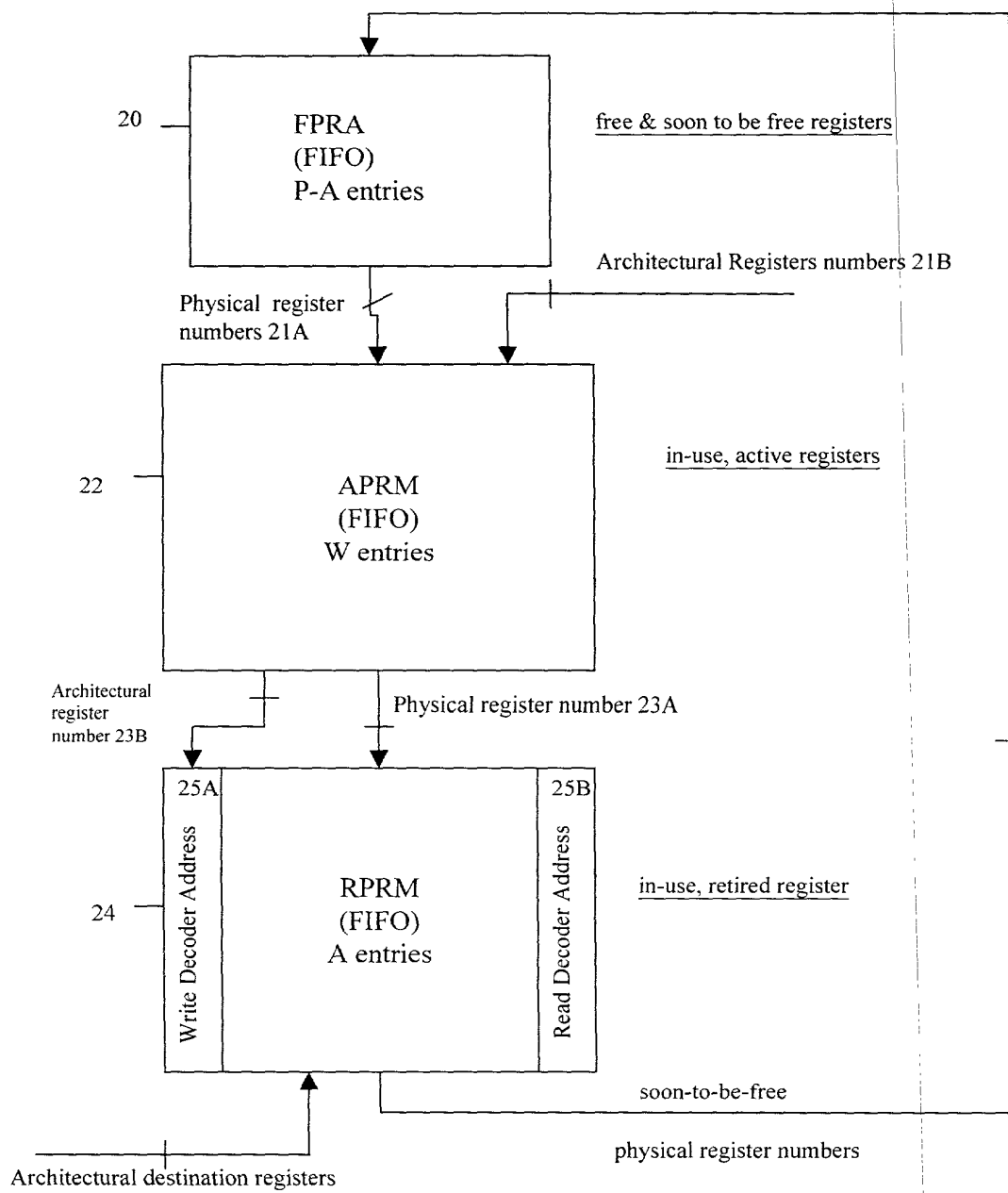


FIGURE 2A

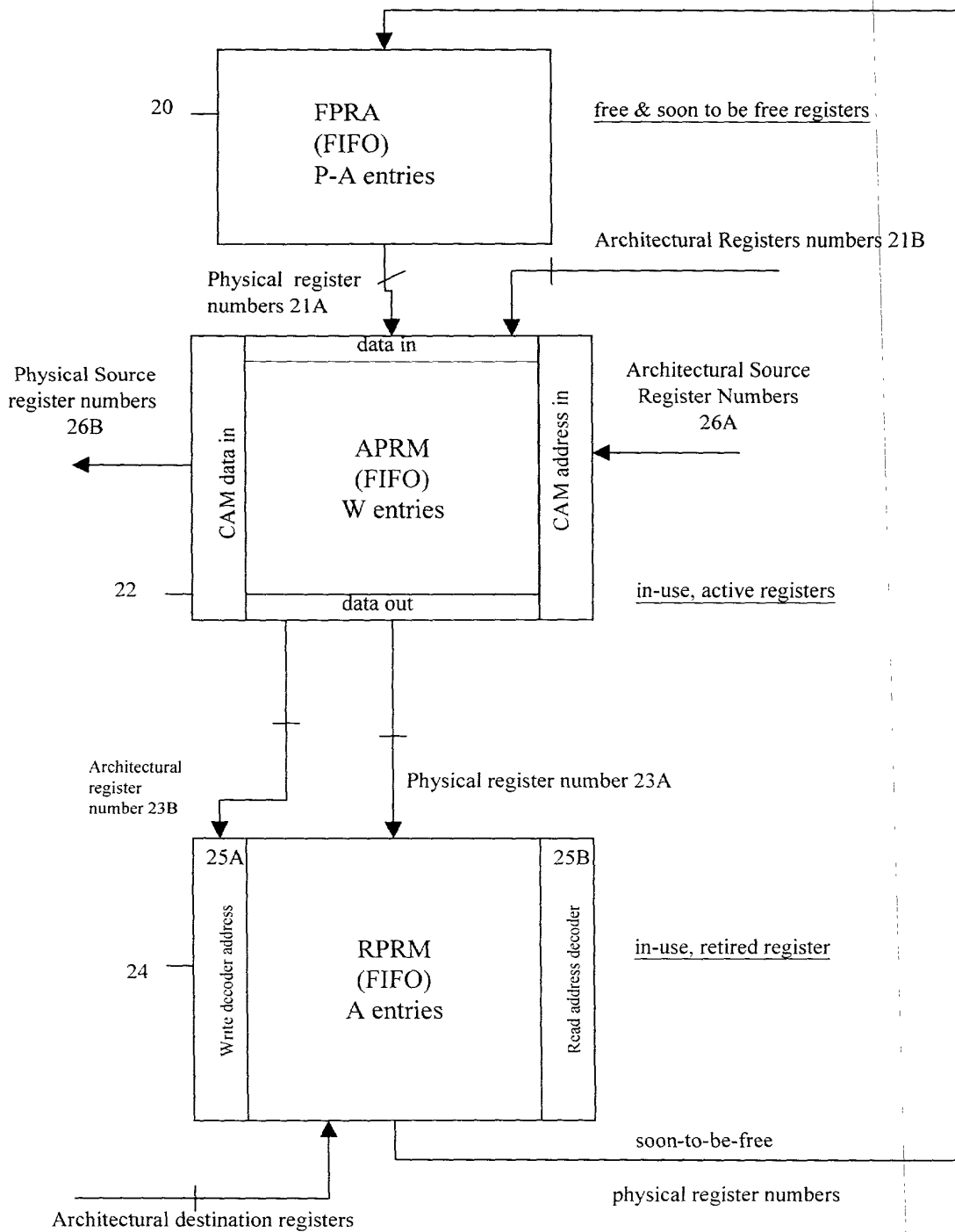


FIGURE 2B

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graph TD
    32[Initialize the FPRA and RPRM memory structures] --> 34[FPRL 20 tags currently available destination operands as "free".]
    34 --> 36[Move physical register assignment information to RPA 22]
    36 --> 38[RPA 22 marks physical assignment information as "in use, not yet retired"]
    38 --> 40{Determine whether instructions retires?}
    40 -- yes --> 42[Physical assignment information moved from RPA 22 to RPM 24]
    42 --> 44[RPM 24 marks physical register assignment as "in use, retired"]
    44 --> 46[Once architectural register is re-used as destination register, move physical register assignment information to FPRL 20 and marked as "soon-to-be-free"]
    46 --> 34
    40 -- no --> 38
  
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FIGURE 3